# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H10EU
Revision 19
AEROSPATIALE
SA-365C
SA-365C1
SA-365C2
SA-365N1
SA-365N1
AS-365N2
SA-366G1
AS 365 N3
EC 155B1
February 15, 2007

### TYPE CERTIFICATE DATA SHEET No. H10EU

This data sheet which is a part of type certificate No. H10EU prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

<u>Type Certificate Holder.</u> EUROCOPTER FRANCE

Aeroport International Marseille Provence

13725 - Marignane - Cedex

France

I. Model SA-365C "Dauphin" (Transport Helicopter, Category B), approved October 11, 1978. Model SA-365C "Dauphin" (Transport Helicopter, Category A), approved May 4, 1979.

Engine. 2 Turbomeca Arriel 1A.

Transmission Limits. (at 350 Rotor rpm) (See NOTE 5 & 6)

Engine Limits. (Sea level static - standard day conditions)

•	•	ŕ		
	Power shaf	ft	Gas generator	Exhaust Gas Temp. T4
2½ min. power rating	651 shp (4	86 Kw)	52,700 rpm	840°C
30 min. power rating	625 shp (4	66 Kw)	52,000 rpm	810°C
Takeoff (min.)	625 shp (4	66 Kw)	52,000 rpm	810°C
Maximum continuous	576 shp (42	30 Kw)	50,750 rpm	775°C
Starting (5 sec.max.)				840°C
Starting (without limit)				775°C
Eng. gearbox limitations	•	(521 Kw) g = 51,80	) @ 350 Rotor rpi 00 rpm	m
Maximum (one eng. inope Maximum Takeoff (5 min Maximum Continuous OR		503 shp	o (523 Kw) o (375 Kw) per en o (350 Kw) per en	
Maximum Takeoff (5 min Maximum Continuous	.)		(430 Kw) per en (397 Kw) per en	C

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Helicopter Limits.	Maximum (one eng. inoperative)	699 shp (521 Kw)	(torque 109%)
(at 350 Rotor rpm)	Maximum (Takeoff (5 min.)	503 shp (375 Kw) per en	gine (torque 78%)
(See NOTE 5 & 6)	Maximum Continuous	469 shp (350 Kw) per en	gine (torque 73%)
	OR		
	Maximum Takaoff (5 min )	577 chn (430 Kw) per en	gina (torque 00%)

Maximum Takeoff (5 min.) 577 shp (430 Kw) per engine (torque 90%) Maximum Continuous 532 shp (397 Kw) per engine (torque 83%)

<u>C.G. Range.</u> Longitudinal: + 151.1 in. to 161.4 in.

Lateral : Right: 4.3 in.

Left: 4.3 in.

Maximum Weight. 7,500 lb.

II. Model SA-365C1 "Dauphin" (Transport Helicopter, Category B), approved August 9, 1979 (See NOTE 5). Model SA-365C1 "Dauphin" (Transport Helicopter, Category A), approved October 5, 1979 (See NOTE 5).

The Model SA-365C1 is identical to the Model SA-365C except for engine model and engine limits.

Engine. 2 Turbomeca Arriel 1A1.

Engine Limits. (Sea level static - standard day conditions)

	Power shp	shaft (Kw)	Gas generator rpm	Exhaust Gas Temp. T4 °C
2½ min. power rating	667	(498)	52,900	840
30 min. power rating	643	(480)	52,250	810
Takeoff (min.)	630	(470)	52,000	810
Maximum continuous	579	(432)	50,750	775
Starting (5 sec.max.)				840
Starting (without limit)				775

Eng. gearbox limitations 699 shp (521 Kw) @ 350 Rotor rpm

100% Ng = 51,800 rpm

Transmission Limits. (at 350 Rotor rpm) (See NOTE 5 & 6)	Maximum (one eng. inoperative) Maximum Takeoff (5 min.) Maximum Continuous OR	701 shp (523 Kw) 503 shp (375 Kw) per engine 469 shp (350 Kw) per engine				
	Maximum Takeoff (5 min.)	577 shp (430 Kw) per engine				
	Maximum Continuous	532 shp (397 Kw) per engine				
Helicopter Limits.	Maximum (one eng. inoperative)	699 shp (521 Kw) (torque 109%)				
(at 350 Rotor rpm)	Maximum Takeoff (5 min.)	503 shp (375 Kw) per engine (torque 78%)				
(See NOTE 6)	Maximum Continuous OR	469 shp (350 Kw) per engine (torque 73%)				
	Maximum Takeoff (5 min.)	577 shp (430 Kw) per engine (torque 90%)				
	Maximum Continuous	532 shp (397 Kw) per engine (torque 83%)				

<u>C.G. Range.</u> Longitudinal: + 151.1 in. to 161.4 in.

Lateral : Right: 4.3 in.

Left: 4.3 in.

Maximum Weight. 7,500 lb.

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#### III. Model SA-365C2 "Dauphin" (Transport Helicopter, Category A and B), approved April 24, 1980.

The Model SA-365C2 differs from SA-365C1 in engine model and limits; gross weight and C.G. range; transmission rating and transmission and helicopter limits.

Engine. 2 Turbomeca Arriel 1A2.

Engine Limits. (Sea level static - standard day conditions)

	Power shaft		Gas generator	Exhaust Gas Temp.
	shp	(Kw)	rpm	T4 °C
2½ min. power rating	670	(500)	52,900	840
30 min. power rating	657	(490)	52,550	810
Takeoff (min.)	630	(470)	52,000	810
Maximum continuous	579	(432)	50,750	775
Starting (5 sec.max.)				840
Starting (without limit)				775

Eng. gearbox limitations 699 shp (521 Kw) @ 350 Kw Rotor rpm

100% Ng = 51,800 rpm

Maximum (one eng. inoperative) 701 shp (523 Kw) Transmission Limits. (at 350 Rotor rpm) Maximum Takeoff (5 min.) 577 shp (430 Kw) per engine Maximum Continuous 532 shp (397 Kw) per engine Maximum (one eng. inoperative) 699 shp (521 Kw) Helicopter Limits. (torque 109%) Maximum Takeoff (5 min.) 577 shp (430 Kw) per engine (torque 90%) (at 350 Rotor rpm) Maximum Continuous 532 shp (397 Kw) per engine (torque 83%)

<u>C.G. Range.</u> Longitudinal: + 151.1 in. to + 161.4 in. up to 7500 lb.

+ 151.1 in. to + 159.8 in. from 7500 lb to 7715 lb.

Lateral : Right: 4.3 in.

Left: 4.3 in.

Maximum Weight. 7,715 lb.

# IV. Model SA-365N "Dauphin" (Transport Helicopter, Category A and B), approved November 20, 1981.

The Model SA-365N differs from SA-365C2 in engine model and limits; gross weight and C.G. range; transmission rating and transmission and helicopter limits.

Engine. 2 Turbomeca Arriel 1C

Engine Limits. (Sea level static - standard day conditions)

	Power shaft		Gas generator	Exhaust Gas Temp.
	shp	(Kw)	rpm	T4 °C
2½ min. power rating	700	(522)	53,199	860
30 min. power rating	686	(512)	52,318	835
Takeoff (min.)	659	(492)	51,800	835
Maximum continuous	586	(437)	50,505	785
Starting (5 sec.max.)				860
Starting (without limit)				785

Eng. gearbox limitations 739 shp (551.5 kw) @ 350 Rotor rpm

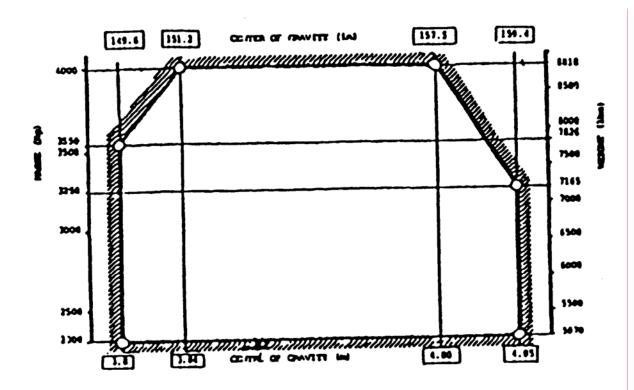
100% Ng = 51,800 rpm

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<u>Transmission Limits.</u>	Maximum (one eng. inoperative)	737	(523)
(at 350 Rotor rpm	Maximum Takeoff (5 min.)	603	(450)
shp (xxxKw) per engine	Maximum Continuous	567	(423)
Helicopter Limits.	Maximum (one eng. inoperative)	737	(550 Kw) (torque 1 or 2: 61%)
(at 350 Rotor rpm)	Maximum Takeoff (5 min.)	603	(450 Kw) (torque 1 + 2: 100%)
shp (xxxKw) per engine	Maximum Continuous	567	(423 Kw) (torque 1 + 2: 94%)

C.G. Range.

Longitudinal:



Lateral: Right 2.95 in. Left 2.95 in.

Maximum Weight.

8,818 lbs

## V. Model SA-365N1 "Dauphin" (Transport Helicopter, Category A and B), approved December 1, 1986.

The Model SA-365N1 differs from SA-365N in engine model and limits; gross weight and tail boom change.

Engine.

2 Turbomeca Arriel 1C1.

Engine Limits.

(Sea level static - standard day conditions)

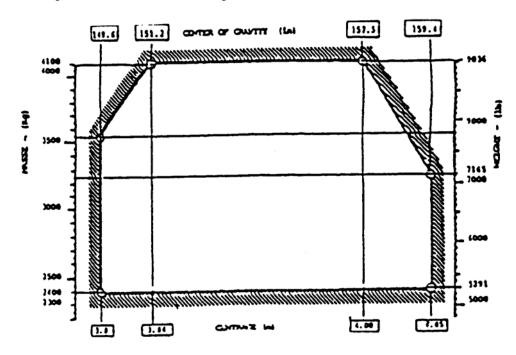
	Power shaft		Gas generator	Exhaust Gas Temp.
	shp	(Kw)	rpm	T4 °C
2½ min. power rating	724	(540)	52,940	865
30 min. power rating	705	(526)	52,215	845
Takeoff (min.)	705	(526)	52,215	845
Maximum continuous	586	(437)	50,246	775
Starting (5 sec.max.)				865
Starting (without limit)				785

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	Eng. gearbox limitations		739 shp (551.5 Kw) @ 350 Kw Rotor rpm 100% Ng = 51,800 rpm			
Transmission Limits.	Maximum (one eng. inopera	tive) 737	(550)			
(at 350 Rotor rpm)	Maximum Takeoff (5 min.)	603	(450)			
shp (xxxKw) per engine	Maximum Continuous	567	(423)			
Helicopter Limits.	Maximum (one eng. inopera	tive) 737	(550 Kw) (torque 1 or 2: 61%)			
	Maximum Takeoff (5 min.)	603	(450 Kw) (torque 1 + 2: 100%)			
	Maximum Continuous	567	(423 Kw) (torque 1 + 2: 94%)			

C.G. Range.

Longitudinal:



Maximum Weight.

9,038 lbs

# VI. Model AS-365N2 "Dauphin" (Transport Helicopter, Category A and B), approved October 31, 1990.

The Model AS-365N2 differs from SA-365N1 in engine model and limits; gross weight and main gearbox torque.

Engine.

2 Turbomeca Arriel 1C2.

Engine Limits.

(Sea level static - standard day conditions)

	Power shaft		Gas generator	Exhaust Gas Temp.
	shp	(Kw)	rpm	T4 °C
2½ min. power rating	712	(531)	52,328	885
30 min. power rating	712	(531)	52,328	845
Takeoff (min.)	712	(531)	52,328	845
Maximum continuous	632	(471)	50,867	775
Starting (5 sec.max.)				865
Starting (without limit)				785

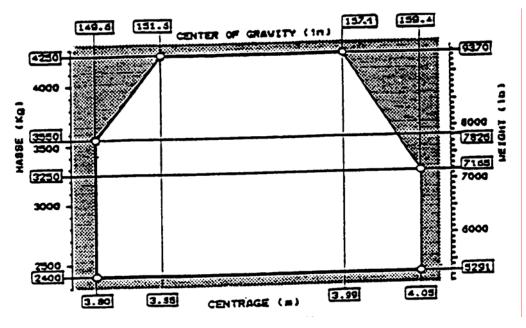
Eng. gearbox limitations

739 shp (551.5 Kw) @ 350 Rotor rpm 100% Ng = 51,800 rpm

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Transmission Limits.	Maximum (one eng. inoperative)	737	(550)
(at 350 Rotor rpm)	Maximum Takeoff (5 min.)	647	(482,5)
shp (xxxKw) per engine	Maximum Continuous	567	(423)
Helicopter Limits.	Maximum (one eng. inoperative)	737	(550 Kw) (torque 1 or 2 : 57%)
	Maximum Takeoff (5 min.)	647	(482,5 Kw) (torque 1 + 2: 100%)
	Maximum Continuous	567	(423 Kw) (torque 1 + 2: 98%)

C.G. Range. Longitudinal:



Right: 2.95 in. Up to 4100 Kg Lateral:

Left: 2.95 in.

Right: 1.96 in. Beyond 4100 Kg

Left: 1.96 in.

9,370 lbs Maximum Weight.

# VII. Model SA-366G1 "Dauphin" (Transport Helicopter, Category A and B), approved July 28, 1983.

Engine. 2 Avco Lycoming LTS 101-750B-2 (See NOTE 10)

Installed Engine Limits. (See NOTE 9 & 10)

/11	gine Limits.	(SCC NOTE ) &	10)			
			ıt Shaft 6 (Ft-Lbs)	Gas Generator Speed-N1 % (RPM)	Output Shaft Speed-N2 % (RPM)	Measured Gas Temperature °C (°F)
	Normal Operation: (Torque 1 + 2)					
	Takeoff power (5 min.)	100	(1056)	104.1 (49830)	102.3 (6138)	786 (1447)
	Max. Continuous	94	( 993)	102.9 (49255)	102.3 (6138)	765 (1409)
	One Engine Inoperative: (Torque 1 or 2)					
	2.5 min. power	100	(643)	106.1 (50787)	102.3 (6138)	822 (1512)

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30 min. power	95.5	(614)	104.8 (50169)	102.3 (6138)	800 (1471)
Max. Continuous	88.2	(567)	102.9 (49255)	102.3 (6138)	765 (1409)

See Rotorcraft Flight Manual for other limitations including speed and temperature transients.

<u>C.G. Range.</u> Longitudinal: + 151.1 in. to 157.5 in.

Lateral : Right 5.62 in.

Left 3.93 in.

<u>Maximum Operating Altitude.</u> 18,000 feet pressure altitude.

Maximum Weight. 8,950 lbs.

VIII. Model AS-365N3 "Dauphin" (Transport Helicopter, Category A and B), approved November 6, 1998.

The Model AS-365N3 differs from AS 365N2 in engine model and limits.

Engine. 2 Turbomeca Arriel 2C engines.

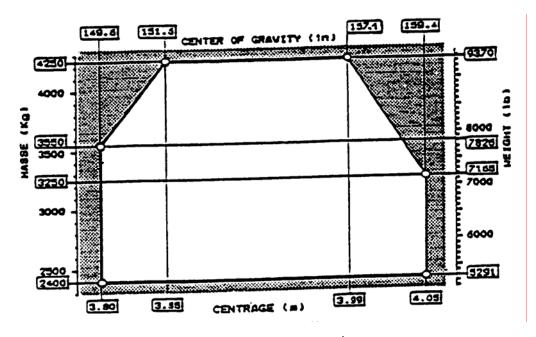
Engine Limits. (Sea level static - standard day conditions)

		Power shaft		Gas generator	Exhaust Gas Temp.
		shp	(Kw)	rpm	T4 °C
	30 sec. OEI rating	944	(704)	55,051	1000
	2 min. OEI rating	851	(635)	53,192	941
	Continuous OEI	818	(610)	52,571	912
	Takeoff (5 min.)	779	(581)	52660	912
	Maximum continuous	779	(581)	51520	877
	Starting (10 sec.max.)				865
	Starting (without limit)				750
	100% Ng = 52,110 rpm				
Transmission Limits.	Maximum continuous (Ol	EI)	815	(608 Kw)	(torque 1 or 2: 63%)
(@ 350 rpm)	Maximum Takeoff (5 mir	ı.)	1294	(965 Kw)	(torque 1 + 2: 100%)
	Maximum Continuous		1138	(849 Kw)	(torque 1 + 2: 88%)

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C.G. Range.

Longitudinal:



Lateral:

al: Right: 2.95 in.

Up to 4100 Kg

Left: 2.95 in.

Right: 1.96 in.

Beyond 4100 Kg

Left: 1.96 in.

Maximum Weight.

9,370 lbs

## IX. Model EC 155B "Dauphin" (Transport Helicopter, Category A and B), approved December 14, 2000.

The Model EC 155B is a derivative of the AS365N3 and incorporates an increase in gross weight, enlarged fuselage structure, a new 5-blade main rotor, a fenestron with RTM technology, and a new avionics and AFCS system.

Engine.

2 Turbomeca Arriel 2C1 engines.

Engine Limits.

(Sea level static - standard day conditions)

	Power shaft		Gas generator	Exhaust Gas Temp.
	shp (Kw)		rpm	T4 °C
30 sec. OEI rating	962	(718)	54,986	1000
2 min. OEI rating	865	(646)	53,126	941
Continuous OEI	833	(622)	52,506	912
Takeoff (5 min.)	779	(581)	52,776	912
Maximum continuous	779	(581)	51,637	877
Starting (10 sec.max.)				865
Starting (without limit)				750

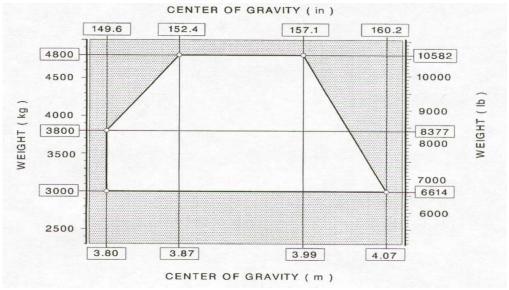
100% Ng = 52,110 rpm

Transmission Limits. Refer to Rotorcraft Flight Manual

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## C.G. Range.

#### Longitudinal:



Lateral: LH Limit –1.97 inches RH Limit +1.97 inches

Datum: 157.5 inches (4 m forward of the main rotor center line) longitudinal

Aircraft symmetry plane lateral

Maximum Weight: 10,582 lbs (4800 kg)

Maximum Altitudes: see rotorcraft flight manual

<u>Airspeed Limits:</u> Power on - 175 KIAS (refer to flight manual for reduction as a function of altitude) Power off – 135 KIAS (refer to flight manual for reduction as a function of altitude)

Rotor Speeds: Power on flight: 342-350 RPM (governed speed range)

Power off flight: Maximum Transient: 390 RPM

Maximum steady State: 375 RPM Minimum: 316 RPM Minumum Transient: 295 RPM

Minimum Flight Crew: One Pilot in the Right Hand Seat

Maximum Seating Capacity: 15 (including pilot seat)

Emergency Exits: 3 Type IV exits on each side of fuselage

Fuel: refer to rotorcraft flight manual

Engine Oil: refer to rotorcraft flight manual

MGB and TGB oil: MIL-L-6086 (Mineral oil)

Fuel Capacity: Total 338 gallons (1280 litres)

Usable 332 gallons (1256.5 litres) Unusable 6 gallons (23.5 litres)

Oil Capacity: Engine oil 2 x 6.2 litres (normal level)

MGB 9 litres (max) TGB 0.5 litres (max)

Serial Numbers eligible: S/N 6544 and up (see note 12)

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## X. Model EC 155B1 "Dauphin" (Transport Helicopter, Category A and B), approved June 3, 2003.

The Model EC 155B1 is a derivative of the EC155B and incorporates the Turbomeca Arriel 2C2 engines.

Engine.

2 Turbomeca Arriel 2C2 engines.

Engine Limits.

(Sea level static - standard day conditions)

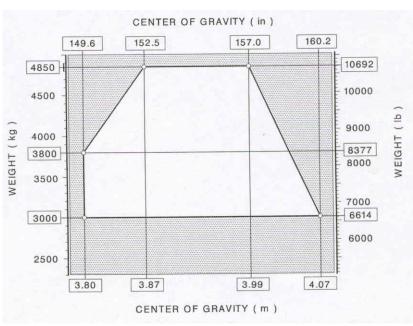
	Power shaft shp (Kw)		Gas generator	Exhaust Gas Temp.
			rpm	T4 °C
30 sec. OEI rating	1006	(750)	55265	996
2 min. OEI rating	956	(713)	53275	944
Continuous OEI	858	(640)	52764	926
Takeoff (5 min.)	821	(612)	53079	929
Maximum continuous	821	(612)	51922	891
Starting (10 sec.max.)				840
Starting (without limit)				

100% Ng = 52,110 rpm

Transmission Limits. Refer to Rotorcraft Flight Manual

C.G. Range.

Longitudinal:



Lateral: LH Limit –1.97 inches RH Limit +1.97 inches

Datum: 157.5 inches (4 m forward of the main rotor center line) longitudinal

Aircraft symmetry plane lateral

Maximum Weight: 10,692 lbs (4850 kg)

Maximum Altitudes: see rotorcraft flight manual

<u>Airspeed Limits:</u> Power on - 175 KIAS (refer to flight manual for reduction as a function of altitude) Power off – 135 KIAS (refer to flight manual for reduction as a function of altitude)

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Rotor Speeds: Power on flight: 342-350 RPM (governed speed range)

Power off flight: Maximum Transient: 390 RPM

Maximum steady State: 375 RPM Minimum: 316 RPM Minumum Transient: 295 RPM

Minimum Flight Crew: One Pilot in the Right Hand Seat

Maximum Seating Capacity: 15 (including pilot seat)

Emergency Exits: 3 Type IV exits on each side of fuselage

Fuel: refer to rotorcraft flight manual

Engine Oil: refer to rotorcraft flight manual

MGB and TGB oil: MIL-L-6086 (Mineral oil)

Fuel Capacity: Total 338 gallons (1280 litres)

Usable 332 gallons (1256.5 litres) Unusable 6 gallons (23.5 litres)

Oil Capacity: Engine oil 2 x 6.2 litres (normal level)

MGB 9 litres (max) TGB 0.5 litres (max)

Serial Numbers eligible: S/N 6620 and up

## DATA PERTINENT TO ALL MODELS.

<u>Fuel.</u> See appropriate model Rotorcraft Flight Manual.

Rotor Speed. - rpm.

		<u>SA365C</u>	<u>SA365N</u>	<u>SA366G1</u>	AS365N2 SA365N1	<u>AS365N3</u>		
In autorotation	Maximum transient	_	420	420	420	420		
	Maximum	420	395	395	395	395		
	Minimum	320	320	320	320	320		
	Minimum transient	285	295	295	295	295		
In power-on flight	all engines operating	350± 10	350 +15 - 10	350 +8 -10	$350 \pm 10$	355-360		
	one engine inoperative	320 (min)	320	340	320	320		
Speed Warning	Low speed	338	335	335	335	345		
(aural)	High speed	400	380	380	380	380		
		(See N	OTE 10)					
Airspeed Limits. Kts - IAS	Never exceed speed V	V <sub>NE</sub> : 170* (6614)	175* (6614)	165* 175* (6614) (6614	.)			
	* At sea level and gross weight (XXXX) lbs.							

See Helicopter Flight Manual for decrease with weight and altitude.

Minimum Crew.		SA365C Series	<u>SA365N</u>	<u>SA366G1</u>	AS365N3 <u>AS365N2</u> SA365N1	
		1 pilot	1	1	1	
Maximum Passengers.		SA365C Series	<u>SA365N</u>	<u>SA366G1</u>	AS365N3 <u>AS365N2</u> <u>SA365N1</u>	
		13	13	2	13	
Maximum Bagga	ge.	See appropriate Model Roto	rcraft Flight Manual	l <b>.</b>		
Fuel/Oil Capacity.		SA365C Series	<u>SA365N</u>	<u>SA366G1</u>	AS365N3 <u>AS365N2</u> <u>SA365N1</u>	
U.S. gals (moment arm in.)						
Fuel: Maximum		169/(147.6)	306/(156.1)	289.8 (156.3)	306/(156.3)	
usal		168.3	303	285.6	302.7	
unu	sable	See NOTE 1	See NOTE 1	See NOTE 1	See NOTE 1	
Oil: engi	ine	x 1.8 (232.3)	2 x 1.37 (160.5)	2 x 1.32 (160.5)	2 x 1.37 (160.5)	
_	smission	2.8 (160.6)	2.4 (160.6)	2.4 (160.6)	2.8 (160.6)	
tailr	rotor	0.07 (407.9)	0.13 (410.6)	0.053 (417)	0.053 (417)	
Empty Weight C.G. Range.		None	None	None	None	
<u>Datum.</u>		157.4* * in forward of main rotor h	157.4* nub center.	157.4*	157.4*	

Leveling Means.

Three plates on the left side of transmission support platform.

Rotor Blades and Control Movements.

For rigging information refer to the Maintenance Manual appropriate to Model.

Serial Numbers Eligible.

The French Government "Certificate de Navigabilite pour Exportation" and as noted below under "Import Requirements" must be submitted for each individual aircraft for which application for FAA certification is made.

#### Certification Basis.

#### Model SA365C Series:

FAR 21.29 and FAR 29 effective February 1, 1965 plus amendments 29-1 through 29-11 plus FAA Special Conditions No.29-69-EU-21, dated April 6, 1976.

The Airworthiness Criteria for Helicopter Instrument Flight, dated December 15, 1978 for IFR certification.

#### Models SA365N, SA366G1, SA365N1, AS365N2:

FAR 21.29 and FAR 29 effective February 11, 1965 plus amendments 29-1 through 29-11. In addition applicant elected to comply with FAR 29 amendments 29-12 through 29-16 except for FAR 29.397 as concerns rotorbrake.

The Airworthiness Criteria for Helicopter Instrument Flight, dated December 15, 1978 for IFR certification.

### Model AS365N3:

FAR 21.29 and FAR 29 effective February 11, 1965 plus amendments 29-1 through 29-16. In addition FAA Special Condition number 29-002-SC for HIRF.

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# Certification Basis. (Continued)

Equivalent Safety Findings -

For Model SA365N1 and AS365N2: Longitudinal Static Stability FAR 29.173 For Model SA366G1: Plenum air intake meets the ice protection of FAR 29.1093(b) Amendment 29-22.

#### Model EC 155B and Model EC155B1

FAR 21.29 and FAR 29 Amendment 29-1 through Amendment 29-40 with the following exceptions:

- Excluding Amendment 29-38 (Occupant Protection)
- Excluding FAR 29.952 introduced at Amendment 29-35 (CRFS)
- Excluding FAR 29.562 introduced at Amendment 29-29
- Excluding FAR 29.631 introduced at Amendment 29-40
- FAR 29.561(a), (b), and (d) at Amendment 29-1
- FAR 29.561(c) at Amendment 29-29
- FAR 29.571 at Amendment 29-20
- FAR 29.571 at Amendment 29-28 fatigue evaluation Composites and new mettalics)
- FAR 29.785 at Amendment 29-24
- FAR 29.901 at Amendment 29-26
- FAR 29.903 at Amendment 29-31
- FAR's 29.963, 29.973, and 29.975 at Amendment 29-26
- FAR 29.1305(a)(4)(i) at Amendment 29-16
- FAR 36 Appendix H through the latest amendment 36-20
- Special Condition 29-007-SC for HIRF
- Equivalent level of safety findings:

FAR 29.723, 29.725, and 29.727 Landing Gear Drop Test FAR 29.807(c) Passenger Emergency Exits; other than side of fuselage FAR 29.173 and 29.175 Static Longitudinal Stability

FAR 29, Appendix B Section IV Return to trim characteristics

Type Certificate No. H10EU issued October 11, 1978.

Date of application for Type Certificate: SA365C model, November 20, 1974.

SA365C1 model, April 6, 1979.

SA365C2 model, October 12, 1979.

SA365N model, April 9, 1979.

SA366G1 model, August 3, 1982.

SA365N1 model, February 17, 1981.

AS365N2 model, February 21, 1989.

AS365N3 model, June 18, 1997. EC 155B model, September 1, 1998

The French Direction Generale de l'Aviation Civile (DGAC) originally type certificated this rotorcraft under its type certificate TC 86. The FAA validated this product under U.S. Type Certificate Number H10EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the DGAC.

Noise Standards.

Models AS365N2 and AS365N3

FAR 36 as amended by amendment 36.1 through 36.16.

Import Requirements.

The FAA can issue a U.S. airworthiness certificate based on a National Aviation Authority (NAA) Export Certificate of Airworthiness (Export

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C of A) signed by a representative of the French Generale de l'Aviation Civile (DGAC) on behalf of the European Community.

The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to comply with the type design approved under U.S. Type Certificate Number H10EU and to be in a condition for safe operation."

The type designs approved under TC H10EU are defined by Aerospatiale Documents:

365A.04.3215 and 365A.05.0408 for model SA365C 365A.05.0416 for model SA365C1 365A.05.0426 for model SA365C2 365A.05.0430 for model SA365N 366A.04.3237 for model SA366G1 (See NOTE 10) 365ABN.0017 Issue a for model SA365N1 365ABN.0017 Issue b for model AS365N2 365ABN.0017 Issue C for model SA365N3 365ABN.0104 for Model EC 155B 365A.04.6840 for Model EC155B1

#### Service Information:

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the French Generale de l'Aviation Civile (DGAC). Any such documents are accepted by the FAA and are considered FAA approved.

- Service Bulletin,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

This applies only to the acceptance of the type design data.

#### Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the helicopter for certification.

 Required and
 Optional Equipment
 SA365C
 SA365N/N1
 SA366G1
 AS365N2

 Aerospatiale Report:
 365A04.3265
 365A04.3983
 366A04.3094
 365A04.4689

365A04.3075

Electronic and

<u>Navigation Equipment</u> 365A04.3228 365A04.3422 366A04.3079 365A04.4693

In addition, the following item of equipment is required:

DGAC-approved Helicopter Flight Manual, Code B, approved December 12, 1978, for Model SA365C.

DGAC-approved Helicopter Flight Manual, Code B, approved August 9, 1979, for Model SA365C1.

DGAC-approved Helicopter Flight Manual, Code B, approved February 18, 1980, for Model SA365C2.

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DGAC-approved Helicopter Flight Manual, Code B, approved September 25, 1981, for Model SA365N.

DGAC-approved Helicopter Flight Manual, Code B, Normal Revision, Approved July 20, 1983, or later approved revisions for Model SA366G1.

DGAC-approved Helicopter Flight Manual, Code B, with RR2A(86-03) and RR2B(86-46) Approved December 1, 1986 or later approved revisions for model SA365N1.

DGAC-approved Helicopter Flight Manual, Code B, approved October 31, 1990, for Model AS365N2.

DGAC-approved Helicopter Flight Manual, Code B, approved December 18, 1997, for Model AS365N3.

DGAC-approved Helicopter Flight Manual, Issue 4 plus Rush Revisions 5A and 5B, Code B, approved July 18, 2000, for Model EC 155B, or later approved revisions. DGAC-approved Helicopter Flight Manual, through Normal Revision RN3, Code B, approved May 5, 2003, for Model EC 155B1, or later approved revisions.

#### NOTES.

NOTE 1.

Current weight and balance report including loading instructions and list of equipment included in the certificated empty weight, must be provided for each helicopter at the time of original certification. The certification empty weight and corresponding center of gravity location must include unusable fuel of 3.5 lb., at 147.6 in., for the SA365C series; 23.1 lb., at 151.6 in., for the SA365N; 35.2 lb., at 151.6 in., for the SA366N1; 51.8 lb., at 151.6 in., for the SA365N1, AS365N2 and AS365N3.

In order to obtain the most consistent weight and balance results, all helicopters should be weighed on jackpoints rather than on wheels and floats. When changes are made to the helicopter which affect the weight and balance, refer to the Flight Manual Weight and Balance Appendix for instructions.

- NOTE 2. Information essential to the proper maintenance of the helicopter is contained in the Manufacturer's SA365C, C1, C2, N, N1, AS365N2,SA366G1, AS365N3, EC 155B, and EC155B1 Maintenance Manual provided with each helicopter.
- NOTE 3. Life limited components and associated retirement times are presented in:
  - 1. SA365C series Master Servicing Recommendations, Appendix 5.99 and titled "Airworthiness Limitations".
  - 2. SA365N, N1,AS365N2, and AS365N3 Master Servicing Recommendations, Appendix 5.99 and titled "Airworthiness Limitations".
  - 3. SA366G1 Master Servicing Recommendations, Appendix 5.99 and titled "Airworthiness Limitations".
  - 4. EC 155B Master Servicing Manual, Chapter 4 titled "Airworthiness Limitations".
  - 5. EC 155B1 Master Servicing Manual, Chapter 4 titled "Airworthiness Limitations".

All parts and component listed there must be replaced in accordance therewith.

- NOTE 4. All placards indicated in the Rotorcraft Flight Manual must be installed in the appropriate location.
- NOTE 5. A. The Model SA365C may be converted to the Model SA365C1 by compliance with Aerospatiale Service Bulletin No. 01.03 dated March 26, 1979.
  - B. The models SA365C or SA365C1 may be converted to the Model SA365C2 by compliance with Aerospatiale Service Bulletin No. 01.07 dated June 5, 1990.
  - C. Intermix of engine models is not permitted.
- NOTE 6. Models SA365C or SA365C1 helicopters are eligible for operation at the higher limits when:
  - 1. Aerospatiale modification No. AMS.365A.07.1665 is incorporated.
  - The torquemeter indicator changes described in Aerospatiale Service Bulletin No. 01.06, dated January 9, 1980, or later dated revision are accomplished; and
  - The DGAC approved Flight Manual revision specified by Service Bulletin 01.06 are included in the Rotorcraft Flight Manual.
- NOTE 7. a) Hover Pressure Refueling system is not approved for installation in Model SA366G1 or any other model under this type certificate (H10EU)
  - b) Fuel jettison system is approved for model SA366G1 only.
- NOTE 8. Model SA366G1 operation is restricted to day, VFR only.
- NOTE 9. For Model SA 366G1 only: The limits shown are installed limits. For computation purposes 100 percent engine output shaft torque is 643 ft.-lb. and, 100 percent engine output shaft (N2) speed is 6000 rpm. Also 100% Gas Generator speed is 47,870 r.p.m.

## NOTE 10. For Model SA366G1: -

- A. Engines 2 installed Lycoming Model LTS-101-750B-2 with plenum air intake.
- B. Helicopter Modifications The Aerospatiale modifications defined in Aerospatiale document No. 366A.04.3237
   must be incorporated.
- Flight Manual The DGAC approved SA366G1 Helicopter Flight Manual, Code B, Normal Revision, approved July 20, 1983, or later approved revision, is required.
- NOTE 11. The Models AS 365N3, EC 155B, and EC155B1 employ electronic engine controls that are recognized to be more susceptible to Electromagnetic Interference (EMI). EMI may be the result of radiated or conducted interference. Modifications that add or change systems that have a potential for EMI must either be qualified to an FAA acceptable standard or tested at the time of installation for interference to the engine controls. This type of testing must employ the particular engine control's diagnostic techniques and external diagnostic techniques specified by the engine and helicopter manufacturers. This testing must be accomplished in accordance with an FAA approved test plan.
- NOTE 12. Model EC 155B S/N's 6544-6547, 6557-6559, 6562-6563, 6569, 6575-6577, 6580-6581, and 6583 are restricted to day/night VFR operation in the United States unless Mod 07-39B96, Mod 07-25C13, and Mod OP-26B17 are incorporated.

.....END.....